

Amendments to the Claims

Claims 1-14 (Canceled)

Claim 15 (Currently Amended) A semiconductor laser driving device comprising:

a semiconductor laser for emitting light irradiated on an optical recording medium;

a photodetecting element for receiving a part of the light emitted from the semiconductor laser and converting the part of light into an electric signal corresponding to a light amount;

a laser driving circuit for inputting a driving signal into the semiconductor laser such that an average value of the electric signal coincides with a target value;

a high-frequency superimposing circuit for superimposing a high-frequency signal over the driving signal; and

a high-frequency superimposing control section for controlling an amplitude of the high-frequency signal,

wherein the high-frequency superimposing control section is operable to control the amplitude of the high-frequency signal such that a peak-to-average ratio that is a ratio of a peak value of the electric signal with respect to the average value of the electric signal does not increase above a first reference value, and

wherein the high-frequency superimposing control section is operable to control the amplitude of the high-frequency signal such that the amplitude decreases to lower the peak-to-average ratio as the average value increases, if the average value is less than a threshold value, and the amplitude increases to raise the peak-to-average ratio as the average value increases, if the average value is larger than the threshold value.

Claim 16 (Canceled)

Claim 17 (Previously Presented) A semiconductor laser driving device according to claim 15, further comprising a peak detecting circuit for receiving the electric signal from the photodetecting element and for detecting the peak value of the electric signal,

wherein the high-frequency superimposing control section is operable to calculate the peak-to-average ratio based on the peak value detected by the peak detecting circuit.

Claim 18 (Previously Presented) A semiconductor laser driving device according to claim 15, further comprising:

a temperature sensor for measuring a temperature of the semiconductor laser; and

a storing section for storing data indicative of a relationship of the average value, the temperature, the amplitude, and the peak-to-average ratio,

wherein the high-frequency superimposing control section is operable to read out the data from the storing section and control the amplitude based on the data, the average value, and the temperature.

Claim 19 (Previously Presented) A semiconductor laser driving device according to claim 15, wherein the high-frequency superimposing control section is operable to control the amplitude such that the amplitude decreases as the temperature of the semiconductor laser increases.

Claims 20 and 21 (Canceled)

Claim 22 (Currently Amended) A semiconductor laser driving device according to claim 15, wherein the high-frequency superimposing control section comprises a data acquiring section for acquiring the first reference value by reading out, from the-an optical recording medium from which information is to be reproduced by use of the emitted light and on which an allowance value of a peak value of the emitted light is recorded, the recorded allowance value.

Claims 23 and 24 (Canceled)

Claim 25 (Previously Presented) A semiconductor laser driving device according to claim 15, wherein the semiconductor laser is operable to emit the light having a wavelength of $390\text{nm} < \lambda < 420\text{nm}$.

Claim 26 (Previously Presented) An optical head device comprising the semiconductor laser driving device of claim 15.

Claim 27 (Previously Presented) An optical information processing device comprising the optical head device of claim 26.

Claim 28 (Previously Presented) An optical recording medium from which information is to be reproduced by the semiconductor laser driving device of claim 22 and which has the allowance value recorded thereon.